WEST Search History

DATE: Wednesday, April 30, 2003

Set Name side by side	Query	Hit Count	Set Name result set
	DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; THES=ASSIGNEE; *PLUR=YES; OP=ADJ*		
L6	5897620.uref.	20	L6
L5	L2 and (cach$3)	37	L5
L4	L2 same (cach$3)	0	L4
L3	L2 same (stale or out-of-date or outdated) same (search$3 or retriev$3 or quer$3)	3	L3
L2	(airline or flight) same seat same (vacan$5 or availab$5)	433	L2
L1	cach$3 same seat same (vacan$5 or availab$5)	1	L1

END OF SEARCH HISTORY

5758149

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End of Result Set

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L3: Entry 3 of 3   File: USPT   Jul 9, 2002

US-PAT-NO: 6418413
DOCUMENT-IDENTIFIER: US 6418413 B2

TITLE: Method and apparatus for providing availability of airline seats

DATE-ISSUED: July 9, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
DeMarcken; Carl G.	Arlington	MA		
Galperin; Gregory R.	Boston	MA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
ITA Software, Inc.	Cambridge	MA			02

APPL-NO: 09/ 244905   [PALM]
DATE FILED: February 4, 1999

INT-CL: [07] G06 F 17/60

US-CL-ISSUED: 705/5; 705/6, 705/7, 705/10
US-CL-CURRENT: 705/5; 705/10, 705/6, 705/7

FIELD-OF-SEARCH: 705/5, 705/6, 705/7, 705/10

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | | Search ALL |

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	5161225	November 1992	Abraham et al.	395/600
☐	5832454	November 1998	Jafri et al.	705/6
☐	5839114	November 1998	Lynch et al.	705/5
☐	5897620	April 1999	Walker et al.	705/5
☐	5918209	June 1999	Campbell et al.	705/5
☐	5999946	December 1999	Bailis et al.	707/201
☐	6085169	July 2000	Walker et al.	705/26

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
WO-00/43927	July 2000	WO	

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Feldman, "Chasing the Rational Marketplace", Air Transport World Dec. 1998 vol. 35
Issue 12 P 32, 2P.

ART-UNIT: 2166

PRIMARY-EXAMINER: Rimell; Sam

ASSISTANT-EXAMINER: Gilligan; Christopher L.

ATTY-AGENT-FIRM: Fish & Richardson P.C.

ABSTRACT:

A computer program product, method and system for producing seat availability
information for a mode of travel such as airline travel produce a prediction of
availability of a seat in accordance with an availability query. The prediction is
used in place of making an actual query to an airline or other travel mode
availability system.

27 Claims, 13 Drawing figures

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L5: Entry 22 of 37   File: USPT   Apr 23, 2002

US-PAT-NO: 6377932
DOCUMENT-IDENTIFIER: US 6377932 B1

TITLE: Rules validation for travel planning system

DATE-ISSUED: April 23, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
DeMarcken; Carl G.	Arlington	MA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
ITA Software, Inc.	Cambridge	MA			02

APPL-NO: 09/ 109486   [PALM]
DATE FILED: July 2, 1998

INT-CL: [07] G06 F 17/60

US-CL-ISSUED: 705/5; 705/6, 705/1
US-CL-CURRENT: 705/5; 705/1, 705/6

FIELD-OF-SEARCH: 705/5, 705/6, 705/1

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected   Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4862357	August 1989	Ahlstrom et al.	364/407
☐	5021953	June 1991	Webber et al.	364/407
☐	5177684	January 1993	Harker et al.	364/436
☐	5191523	March 1993	Whitesage	705/6
☐	5237499	August 1993	Garback	364/407
☐	5253166	October 1993	Dettelbach et al.	705/5
☐	5255184	October 1993	Hornick et al.	364/407
☐	5331546	July 1994	Webber et al.	705/6
☐	5422809	June 1995	Griffin et al.	705/5
☐	5570283	October 1996	Shoolery et al.	364/407
☐	5623413	April 1997	Matheson et al.	364/436
☐	5644721	July 1997	Chung et al.	395/206
☐	5732398	March 1998	Tagawa	705/5
☐	5794172	August 1998	Matheson et al.	701/117
☐	5797127	August 1998	Walker et al.	705/5
☐	5832454	November 1998	Jafri et al.	705/6
☐	5838973	November 1998	Carpenter-Smith et al.	395/701
☐	5897620	April 1999	Walker et al.	705/5
☐	5948040	September 1999	DeLorme et al.	701/201

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 451 371	October 1991	EP	
0 762 306	March 1997	EP	
WO 89/07798	August 1989	WO	
WO 97/08639	June 1997	WO	
WO 99/01822	January 1999	WO	
WO 00/002152	January 2000	WO	

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Strom, David, "Embryonic use of SQL Server yields fare payoff", PC Week, pp. 2-3, Apr. 1989.*
Wong, J.-T., "Flexible assignment approach to itinerary seat allocation", Transportation Research, p. 1 (abstract), Feb. 1993.*
"Towards desktop personal travel agents", D.T. Ndumu, J.C. Collis and H.S. Nwana, BT Technol. J., vol. 16, No. 3, Jul. 1998, pp. 69-78.

ART-UNIT: 2765

PRIMARY-EXAMINER: Hafiz; Tariq R.

ASSISTANT-EXAMINER: Robinson-Boyce; Akiba

ATTY-AGENT-FIRM: Fish & Richardson P.C.

ABSTRACT:

An airline travel planning system is described. The system includes a server

computer executing a server process including a search process to search for set of pricing solutions in accordance with at least one destination and at least one origin. The search process represents the set of pricing solutions in the form of a directed acyclic graph. The system also includes a client computer executing a client process on the set of pricing solutions. The client process has a manipulation process that manipulates the set of pricing solutions in response to user preferences. Several processes are described including a process responsive to user preferences and to set of pricing solutions that provides pricing solutions sorted by said user preference, a process that sorts set of pricing solutions to produce a subset of said set of pricing solutions in accordance with user specified preferences, and a process that prunes from the directed acyclic graph nodes that are no longer contained within the subset of set of pricing solutions.

29 Claims, 33 Drawing figures

WEST

☐ | Generate Collection | | Print |

US-PAT-NO: 6360205
DOCUMENT-IDENTIFIER: US 6360205 B1

TITLE: Obtaining and utilizing commercial information

DATE-ISSUED: March 19, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Iyengar; Maya L.	Aurora	CO		
Reid; Aaron J.	Lakewood	CO		
Toffa; Antoine K.	Parker	CO		
Heithoff; Russel W.	Aurora	CO		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Trip.com, Inc.	Englewood	CO			02

APPL-NO: 09/ 263310   [PALM]
DATE FILED: March 5, 1999

PARENT-CASE:
This application is related to and claims priority from Provisional Patent
Application No. 60/106,423, filed Oct. 30, 1998. This application contains a
microfiche appendix consisting of 3 microfiche sheets and 150 frames.

INT-CL: [07] G06 F 17/00

US-CL-ISSUED: 705/5; 705/80
US-CL-CURRENT: 705/5; 705/80

FIELD-OF-SEARCH: 705/5, 705/80, 705/79, 705/6

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | | Search ALL |

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4775936	October 1988	Jung	705/5
☐	4931932	June 1990	Dalnekoff et al.	705/5
☐	5237499	August 1993	Garback	705/5
☐	5239480	August 1993	Huegel	705/5
☐	5253165	October 1993	Leiseca et al.	705/5
☐	5253166	October 1993	Dettelbach et al.	705/5
☐	5289371	February 1994	Abel et al.	705/5
☐	5422809	June 1995	Griffin et al.	705/5
☐	5483444	January 1996	Heintzeman et al.	705/5
☐	5570283	October 1996	Shoolery et al.	705/5
☐	5652867	July 1997	Barlow et al.	395/500
☐	5732398	March 1998	Tagawa	705/5
☐	5781892	July 1998	Hunt et al.	705/5
☐	5797127	August 1998	Walker et al.	705/5
☐	5832451	November 1998	Flake et al.	705/5
☐	5832454	November 1998	Jafri et al.	705/6
☐	5839114	November 1998	Lynch	705/5
☐	5933810	August 1999	Okawa	705/5
☐	5940803	August 1999	Kanemitsu	705/6
☐	5948040	September 1999	Delorme et al.	701/201
☐	5953705	September 1999	Oneda	705/5
☐	5978770	November 1999	Waytena et al.	705/5
☐	5983220	November 1999	Schmitt	707/5

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FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
409114885	May 1997	JP	

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"http://www.usairway.com", "Select Your Departure Flight", p. 1, 1998.*
"http://www.usairways.com", "Review the ticket price information", p. 1, 1998.*
"http://www.usairways.com", "Reserve a Flight", p. 1, 1998.*
"http://www.usairways.com", "No Quotable Fare", p. 1, 1998.*
"http://www.usairways.com", "Login to Personal Travel Works", p. 1, 1998.*
Website of Travelterminal.com, 1999.*
Maddox, K., "Traveling on the web", Informationweek, Jan. 1997.*
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McWill-iams, G., "Clipping Wings on the Web", Business Week, 1997.*
M2 PressWire, Internet Travel Network: Internet Travel Network Completes Strategic Investment from United Airlines, May 1998.*
Pack, T., "Travel Sites", Link-Up, Sep. 1997.*
Flint, P., "Sabre Unleashed", Air Transport World, Nov. 1996.*

Website of dealtime.com, 1998.*
PR NewsWire, "PR Newswire California Summary", Dec. 1998.*
Derwent -ACC-NO: 2000-365835; Heithoff, R. W. et al., May 2000.*
The Economist, "Roboshop", Jun. 14, 1997.

ART-UNIT: 2161

PRIMARY-EXAMINER: Trammell; James P.

ASSISTANT-EXAMINER: Elisca; Pierre E

ATTY-AGENT-FIRM: Sheridan Ross P.C.

ABSTRACT:

In accordance with the present invention, a method for providing reservation
information related to airline flights, lodging, transportation and the like using a
communications network is disclosed. In one embodiment, access to a server machine
is divided into sessions. During a first session a user machine makes a first
request for reservation information from the server machine. This first request
includes input data from a first customer which relates to the desired reservation
information. For example, the first customer may input travel times in the hopes of
booking a flight which corresponds to those times. The server machine requests the
reservation information from a number of target sites based upon the input data.
Included in the number of target sites is a first and second target sites. The
server machine obtains reservation information which includes first and second
reservation information respectively from the first and second target sites.

37 Claims, 36 Drawing figures

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L5: Entry 36 of 37   File: USPT   Nov 9, 1993

US-PAT-NO: 5261069
DOCUMENT-IDENTIFIER: US 5261069 A

TITLE: Method of maintaining consistency of cached data in a database system

DATE-ISSUED: November 9, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wilkinson; W. Kevin	Sunnyvale	CA		
Neimat; Marie-Anne	Atherton	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Hewlett-Packard Company	Palo Alto	CA			02

APPL-NO: 07/ 566732   [PALM]
DATE FILED: August 13, 1990

INT-CL: [05] G06F 1/00

US-CL-ISSUED: 395/425; 395/600, 364/DIG.2, 364/974, 364/969, 364/969.2, 364/964, 364/964.2
US-CL-CURRENT: 711/145; 707/8

FIELD-OF-SEARCH: 364/2MSFile, 364/9MSFile, 395/425, 395/400, 395/600

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

| Search Selected | | Search ALL |

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐ 4755930	July 1988	Wilson, Jr. et al.	364/200
☐ 4775955	October 1988	Liu	364/900
☐ 4897782	January 1990	Bennett et al.	395/600
☐ 4965719	October 1990	Shoens et al.	395/650
☐ 5029169	July 1991	Smyk	371/19
☐ 5055999	October 1991	Frank et al.	364/200
☐ 5077658	December 1991	Bendert et al.	395/600
☐ 5091846	February 1992	Sachs et al.	395/250
☐ 5113514	May 1992	Albonesi et al.	395/425
☐ 5140685	August 1992	Sipple et al.	395/425
☐ 5161227	November 1992	Dias et al.	395/725

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"VAXclusters: A Closely-Coupled Distributed System", by Kronenberg, N. P., Levy, H. M., Strecker, W. D.; ACM Transactions on Computer Systems, vol. 4, No. 2, May 1986, pp. 130-146.
"Integrated Concurrency-Coherency Controls for Multisystem Data Sharing", by Dias, D. M., Balakrishna, R. I., Robinson, J. T. and Yu, P. S.; IEEE Transactions on Software Eng., vol. 15, No. 4, Apr. 1989, pp. 437-448.

ART-UNIT: 232

PRIMARY-EXAMINER: Rudolph; Rebecca L.

ABSTRACT:

A method of maintaining the consistency of cached data in a client-server database system. Three new locks--a cache lock, a pending lock and an out-of-date lock--are added to a two-lock concurrency control system. A new long-running envelope transaction holds a cache lock on each object cached by a given client. A working transaction of the client works only with the cached object until commit time. If a second client's working transaction acquires an "X" lock on the object the cache lock is changed to a pending lock; if the transaction thereafter commits the pending lock is changed to an out-of-date lock. If the first client's working transaction thereafter attempts to commit, it waits for a pending lock to change; it aborts if it encounters an out-of-date lock; and otherwise it commits.

17 Claims, 8 Drawing figures

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US-PAT-NO: 6381578
DOCUMENT-IDENTIFIER: US 6381578 B1

TITLE: Factored representation of a set of priceable units

DATE-ISSUED: April 30, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
DeMarcken; Carl G.	Arlington	MA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
ITA Software, Inc.	Cambridge	MA			02

APPL-NO: 09/ 109876   [PALM]
DATE FILED: July 2, 1998

INT-CL: [07] G06 F 17/60

US-CL-ISSUED: 705/6; 705/400
US-CL-CURRENT: 705/6; 705/400

FIELD-OF-SEARCH: 701/201, 701/202, 705/5, 705/6, 705/400, 707/10, 707/102, 707/104, 709/217, 709/218, 709/219

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected   Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4862357	August 1989	Ahlstrom et al.	705/6
☐	5021953	June 1991	Webber et al.	364/407
☐	5177684	January 1993	Harker et al.	701/117
☐	5191523	March 1993	Whitesage	364/407
☐	5237499	August 1993	Garback	705/6
☐	5253166	October 1993	Dettelbach et al.	705/5
☐	5255184	October 1993	Hornick et al.	705/6
☐	5331546	July 1994	Webber et al.	705/6
☐	5422809	June 1995	Griffin et al.	364/407
☐	5570283	October 1996	Shoolery et al.	364/407
☐	5623413	April 1997	Matheson et al.	701/117
☐	5644721	July 1997	Chung et al.	395/206
☐	5732398	March 1998	Tagawa	705/6
☐	5794172	August 1998	Matheson et al.	701/117
☐	5797127	August 1998	Walker et al.	705/5
☐	5802492	September 1998	Delorme et al.	701/200
☐	5832454	November 1998	Jafri et al.	705/6
☐	5838973	November 1998	Carpenter-Smith et al.	395/701
☐	5848395	December 1998	Edgar et al.	705/9
☐	5897620	April 1999	Walker et al.	705/5
☐	5918209	June 1999	Campbell et al.	705/5
☐	5948040	September 1999	DeLorme et al.	701/201
☐	6029162	February 2000	Schultz	707/2

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
WO 89/07798	August 1989	EP	
0 451 371	October 1991	EP	
0 762 306	March 1997	EP	
WO 97/08639	June 1997	WO	

OTHER PUBLICATIONS

Brown: "An economic model of airline hubbing-and spoking"; Logistics and
Transportation Review, Sep. 1991, vol. 27, No. 3, p. 225.*
"Towards desktop personal travel agents", D.T. Ndumu, J.C. Collis and H.S. Nwana, BT
Technol. J., vol. 16, No. 3, Jul. 1998, pp. 69-78.

ART-UNIT: 2161

PRIMARY-EXAMINER: Cosimano; Edward R.

ATTY-AGENT-FIRM: Fish & Richardson P.C.

ABSTRACT:

An airline travel planning system is described. The system includes a server
computer executing a server process including a search process to search for set of

pricing solutions in accordance with at least one destination and at least one origin. The search process represents the set of pricing solutions in the form of a directed acyclic graph. The system also includes a client computer executing a client process on the set of pricing solutions. The client process has a manipulation process that manipulates the set of pricing solutions in response to user preferences. Several processes are described including a process responsive to user preferences and to set of pricing solutions that provides pricing solutions sorted by said user preference, a process that sorts set of pricing solutions to produce a subset of said set of pricing solutions in accordance with user specified preferences, and a process that prunes from the directed acyclic graph nodes that are no longer contained within the subset of set of pricing solutions.

22 Claims, 33 Drawing figures